# Operation of the Buckley lab speed-vac

## Authorship

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## Method

1. Turn on the main power.
2. If heat is desired, set the proper temperature.
3. Hold down **Start** and **Stop** keys simultaneously to begin warming up the pump.
   * Allow 10 minutes for the pump to warm up.
   * When done warming up, press **Stop**.
4. Toggle to the desired function by pressing and holding the **Brake** and **Set Temp** keys simulantaneously.
   * **Function 1:** for EtOH precipitation
   * **Function 2:** for high vapor pressure solvents
   * **Function 3:** for aqueous solutions
   * **Note:** On start-up, the device defaults to Function 1.

**Indicators of which function is selected:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ------ | Ventilation control lamp | ------ | Vacuum control lamp |
| **Function 1** |  |  |  |  |
| during run |  | flashes |  | lights up constantly |
| in standstill |  | flashes |  | off |
| **Function 2** |  |  |  |  |
| during run |  | off |  | lights up constantly |
| in standstill |  | lights up constantly |  | off |
| **Function 3** |  |  |  |  |
| during run |  | off |  | flashes |
| in standstill |  | lights up constantly |  | flashes |

1. Hit **Start** to begin the run.
   * Check samples every ~10-15 min to make sure they are concentrating properly
2. Hit **Stop** to end the run.
3. Remove samples
4. Hold down **Start** and **Stop** keys to restart the vacuum pump.
5. Hold down the **Start** key for **5 seconds** to purge moisture/solvents from the vacuum pump.
6. When done, hit the **Stop** key to shut off the pump.
7. Turn the main power off.

**WARNING: Since this device does not currently contain a cooling trap, this unit should not be used with the following materials:**

* Poisonous, corrosive, caustic, or hazardous liquids
* Pathogenic bacteria
* Phenol, Chloroform, or Formamide

**Note:** This unit spins at 1,200 rpm.